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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,334	11/30/2001	Masahiro Sato	NGB-106-A	4987

7590 09/09/2004

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EXAMINER	
CULBRETH, ERIC D	
ART UNIT	**PAPER NUMBER**
3616	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/997,334	SATO ET AL.
	Examiner	Art Unit
	Eric D Culbreth	3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-9 and 12-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-9 and 12-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other. _____.

DETAILED ACTION

Response to Amendment

1. Regarding the amendments to the specification filed 8/18/04, there is no paragraph on page 3 beginning "Further, the air bag system...". Moreover, a substitute specification was filed 9/12/03, and these changes are meant apparently for the original specification, where they would not be printed in an issued patent. The changes to the specification should be resubmitted with instructions on where to enter them in the substitute specification.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-3, 5, 9, 12-15, 19-20 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2-3 and 9 "flowing the gas" is indefinite (this is not a proper use of the term "flowing" and hence is unclear).

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-3, 7, and 16-19 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Shiota et al (of record).

Shiota et al discloses an air bag folded and housed in an instrument panel (column 1, lines 15-25) and inflated by an inflator 16 when the vehicle collides (column 1, lines 15-25). As seen in Figure 2, gas from the generator flows into an opening portion of the air bag (at the left side of the bag in Figure 2). A gas flow path extends continuously from the opening portion above and below cavity 20, and the gas flow path extends continuously to an occupant restraint portion at the right side of Figure 2 which is spaced from the opening portion at the left side of the airbag. Therefore, gas flows continuously from the opening portion to the occupant restraint portion through the gas flow path portion. Cloth 108 is a penetrating portion extending through the gas flow portion. The penetrating portion constricts flow in the gas flow path portion as functionally recited inasmuch as applicant's penetrating portion and is adjacent to the opening portion in the embodiment of Figure 2 (where the opening portion is considered to be the portion or area of the bag near where the bag is attached to container 12; the claim language is so broad in reciting an "opening portion" that Shiota et al reads on this limitation) so that the penetration portion constricts and regulates the gas flowing into the airbag as functionally recited (claim 1).

Regarding claim 2, the penetrating portion 108 divides the gas flow path portion into two flow paths at least.

Regarding claim 7, as functionally recited, penetrating portion 108 reduces an opening area of the gas flow path portion.

Regarding claims 16-17, Shiota et al teaches the penetrating portion being sealed (note Shiota et al, column 3, lines 1-4, where the ends of the cloth 108 are both seamed to openings

106, 107 in sides panels 104, 105, and also note column 4, lines 15-21, where Shiota et al teaches that vent holes 24, 24a may be disposed some other place than facing cavities 20, 20a and hence some other place than on penetrating portion 108, leaving the penetrating portion sealed).

Regarding claim 3, Shiota et al's cloth 108 is also a "joint portion" as broadly recited in that it is a portion joined by sewing to the side walls 104, 105 of the air bag 10. As functionally recited in claim 18, the penetrating portion extends through the gas flow path portion and restricts the volume of air that flows therethrough. As discussed previously (claim 19), the joint portion 108 would reduce the volume of the air bag and connects opposing sections of the gas flow portion inasmuch as applicant's disclosed invention (i.e., it connects those portions of the side walls 104, 105 forming the gas flow portion by sewing).

6. Claims 3, 5 and 12-15 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Maruyama (of record).

Maruyama discloses an air bag in a folded state housed in an instrument panel inflated by inflator 16 when the vehicle collides (column 1, lines 15-25), the air bag having an opening portion attached to container 12 receiving gas from inflator 16, a gas flow path portion 22, 24 extending continuously from the opening portion, and an occupant restraint portion at 23 spaced from the opening portion. The occupant restraint portion 23 extends continuously from the gas flow portion, whereby the gas flows from the opening portion to the occupant restraint portion through the gas flow path portion. At least one joint portion 25 is located within the air bag, the joint portion dividing the gas flow path portion into two or more paths 22, 24 for "flowing" the gas from the opening portion to the occupant restraint portion through the gas flow path portion.

The joint portion constricts flow from the area around vent hole 26 and is disposed adjacent the opening portion in view of the broad recitation of the opening portion (i.e. if the opening portion is considered to include the portion of the bag near the opening and p to the guide member 20). As functionally recited, the joint portion regulates the flow of gas from the opening portion to the occupant restraint portion through the gas flow portion, and the joint portion is only in the gas flow portion, as the guide member 20 the area of the bag making up the gas flow portion as broadly recited (claim 3). The joint portion is formed by sewing parts 20a, 10 of the air bag portions forming the gas flow portions together (note the first two lines of the abstract, where the air bag is formed of a panel and guide member (20))(claim 5).

Maruyama's bag has a plurality of joint portions (i.e., one on either side of pieces 20a and 20b), the joint portion(s) reduce an opening area of the gas flow path portion (by holding pieces 20a, 20b in place), and the joint portions in holding pieces 20a, 20b in place divide the gas flow path portion into multiple flow paths 22, 24 (claims 12-15).

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 6 and 8-9 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiota et al to include a plurality of penetrating portions such as cylindrical

cloth 108 in order to reduce the volume necessary to fill the air bag (column 4, lines 23-33) using an obvious design variant (case law (St. Regis Paper Co. v Bemis Co. Inc., 193 USPQ 8, 11 (7th Cir. 1977) holds that it is obvious to duplicate parts (i.e., use more than one cylindrical cloth) for multiplied effect (to require even less gas to inflate the bag)). The penetrating portions in the obvious design variant would reduce an opening area of the gas flow path portion as functionally recited.

9. Claims 20-23 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 135940 (of record) in view of Maruyama.

Japanese '940 discloses an opening 2, 2 in a bag that is folded (Figure 1) into which gas from an inflator 3 flows. A gas flow path portion extends continuously from the opening portion at 2, 2 and an occupant restraint portion (the remote half of bag body 1 spaced from opening portion 2, 2) extends continuously from the gas flow path portion. The portion of the bag between the openings at 2, 2 is both a penetrating portion only in the gas flow path portion between the opening portion and the remote half of the bag forming the occupant protection portion and the joint portion dividing the gas flow path portion into two or more paths for "flowing" the gas from the opening portion to the occupant restraint portion and located only in the gas flow path portion; the portion of the bag between openings 2, 2 also constricts flow adjacent to the opening portion and hence regulates flow (claims 1, 3 and 17 from which claims 20-23 depend). However, regarding claims 1, 3 and 17, Japanese '940 does not teach the folded air bag in an instrument panel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese '940 to include the air bag in an instrument

panel as taught by Maruyama's instrument panel 18 in order to use the bag to protect a vehicle occupant. The bag would be folded in the instrument panel in keeping with Japanese '940's Figure 1. Regarding claims 20-23, in the combination the joint portion between openings 2, 2 directly connects upper and lower surfaces of the gas flow portion of the air bag (i.e., as the air bag is deployed above the instrument panel in Maruyama's Figure 1 and the openings of Japanese '940 are at the end parts 2 along sides of the inflator 3 in the English abstract, in the combination the portion between the openings at 2, 2 would connect the top and bottom of the bag in the gas flow path portion area). And the gas flow path portion in the combination, being adjacent to the inflator, would be above an upper surface of the instrument panel to substantially cover the upper surface inasmuch as applicant's disclosure when the bag is inflated.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric D Culbreth
Primary Examiner
Art Unit 3616

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